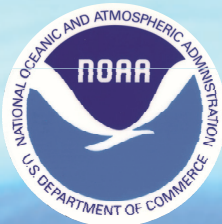


NOAA: Serving the Needs of the Nation

NOAA Satellites – 2010 and Beyond



Mary Kicza
ESIP Federation Winter Meeting
January 5, 2011

NESDIS FY 2010 Accomplishments

- **Launched GOES-15**
- **Provided support during Deep Water Horizon Oil Spill**
- **Provided critical info during Icelandic Eyjafjallajokull Volcanic Eruption**
- **Expanded Climate Reference Network**
- **Provided detailed data on Global Warming**

NESDIS FY 2010 Accomplishments

- Released NOAA Climate Services Portal
- Supported Haiti Disaster Relief
- Completed construction of Fairbanks Alaska Satellite Operations Facility
- Repositioned GOES-12 the GOES South America Satellite
- Published the World Ocean Atlas 2009

NESDIS Changes: 2010 - 2011

- **Joint Polar Satellite System (JPSS)**
- **National Space Policy**
 - NOAA retains national role in satellite continuity
- **New NOAA Strategic Plan**
 - NESDIS primarily under Science and Technology
- **Climate Service (www.climate.gov)**
 - Data Centers would transfer to Climate Service
 - NESDIS would become the National Environmental Satellite Service (NESS)
- **NESS Strategic Plan in draft form**
- **Intend to release for Public comment shortly**
- **Data centers not explicitly included in the plan**

NOAA's New Strategic Plan

- **NOAA's Next Generation Strategic Plan was released in December 2010:** www.ppi.noaa.gov/NGSP3/NOAA_NGSP.pdf
- **NOAA's Mission :**
Science, Service, and Stewardship - To understand and predict changes in climate, weather, oceans, and coasts, To share that knowledge and information with others, and To conserve and manage coastal and marine ecosystems and resources.
- **NOAA's Vision of the Future:**
Resilient Ecosystems, Communities, and Economies, Healthy ecosystems, communities, and economies that are resilient in the face of change

NOAA's New Goals: Mission Oriented

NOAA's four Mission-oriented Long-term Goals:

- **Climate Adaptation and Mitigation**

An informed society anticipating and responding to climate and its impacts

- **Weather-Ready Nation**

Society is prepared for and responds to weather-related events

- **Healthy Oceans**

Marine fisheries, habitats, and biodiversity are sustained within healthy and productive ecosystems

- **Resilient Coastal Communities and Economies**

Coastal and Great Lakes communities are environmentally and economically sustainable

NOAA's New Goals: Enterprise Objectives

- **NOAA's Science and Technology Enterprise**

Objective: A holistic understanding of the Earth system through research

Objective: Accurate and reliable data from sustained and integrated Earth observing systems

Objective: An Integrated environmental modeling system

- **NOAA's Engagement Enterprise**

Objective: An engaged and educated public with an improved capacity to make scientifically informed environmental decisions

Objective: Integrated services meeting the evolving demands of regional stakeholders

Objective: Full and effective use of international partnerships and policy leadership to achieve NOAA's mission objectives

- **NOAA's Organization and Administration Enterprise**

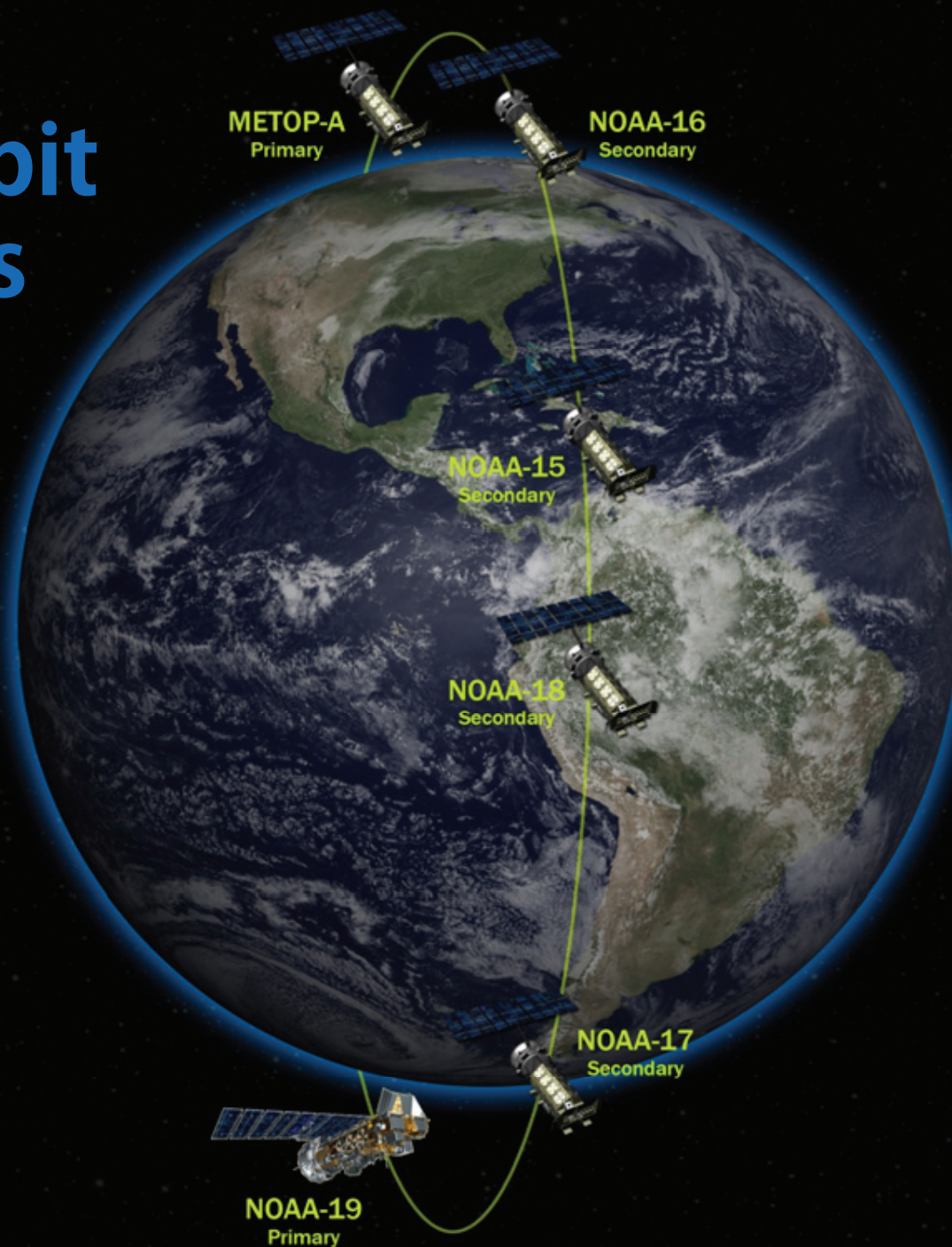
NESS Strategic Goals

1. Ensure continuity of data and services delivery in support of NOAA's missions in weather, climate, oceans and healthy coasts.
2. Improve the timeliness, accuracy and the reliable delivery of products and services in support of NOAA services.
3. Infuse new capabilities and technologies through transitions from research to operations
4. Augment NOAA's capabilities by leveraging existing and planned capabilities of other organizations to satisfy observational requirements.
5. Develop people, improve processes and enhance infrastructure to optimize efficiency and effectiveness across the entire enterprise.

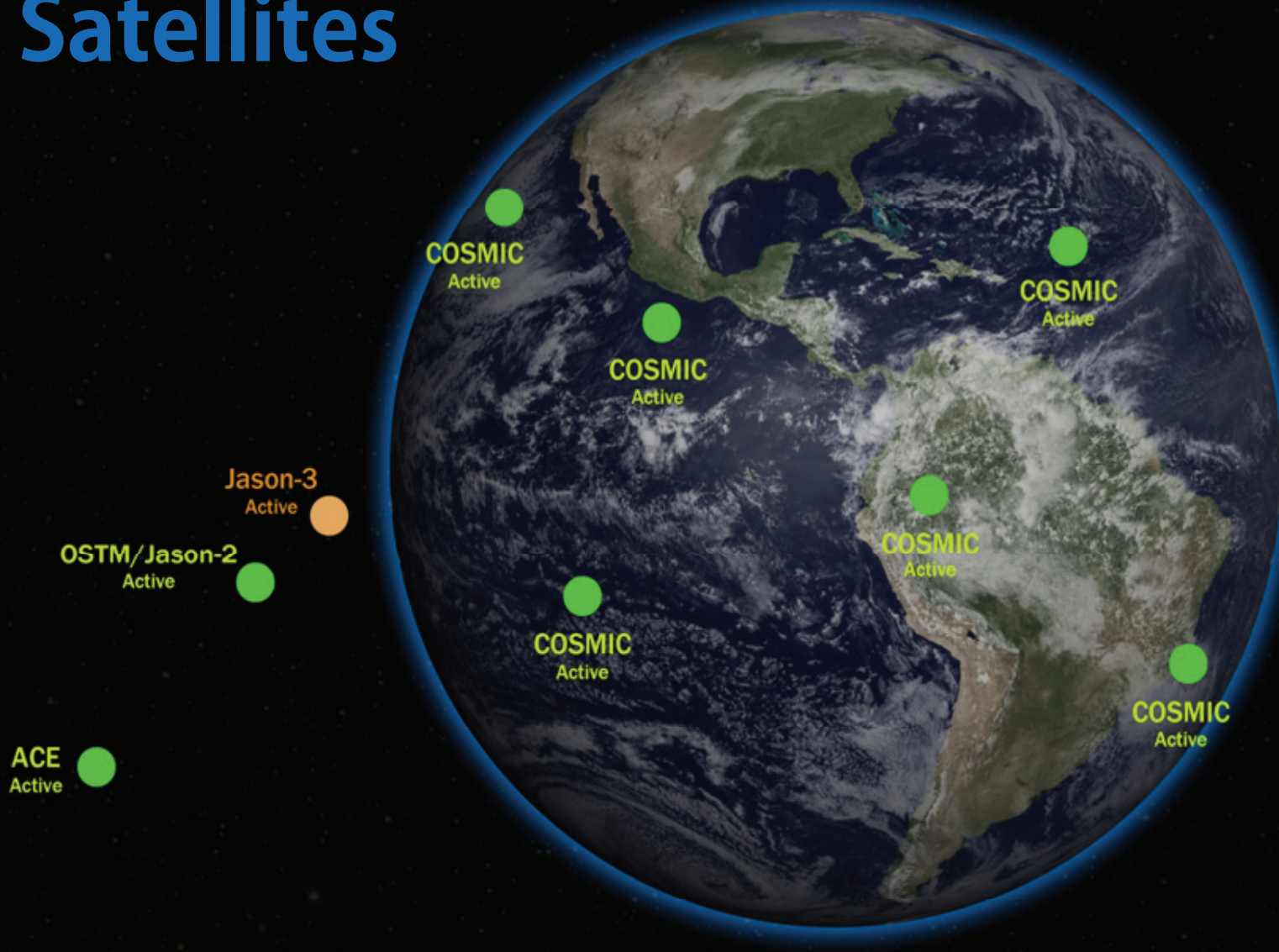
NOAA's Geostationary Satellites



NOAA's Polar-orbit Satellites



Other Satellites



International Partnerships are Integral to NOAA's Mission

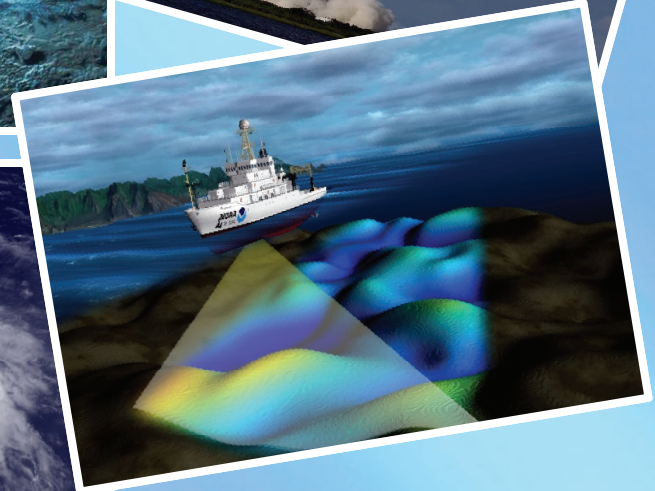
- **Working together with international partners is crucial to obtaining continuity, global coverage, and filling gaps**
- **NOAA-EUMETSAT have Initial Joint Polar System following Metop-A launch in 2006; Joint Polar System negotiations underway to extend to JPSS era; Jason-3 altimetry mission planned for 2013**
- **Cooperation with JAXA's Global Change Observation Mission-Water (GCOM-W1) for access to AMSR-2 instrument data to fulfill unmet JPSS requirement in exchange for ground segment support**
- **Together with NASA, exploring access to ISRO's Oceansat-2 scatterometer data given demise of QuikSCAT**

International Partnerships are Integral to NOAA's Mission

- **International opportunities for research to operations**
NOAA pursuing with Europe/Jason-CS and with Taiwan/COSMIC-2
- **International Space Collaboration**
For Example: China Meteorological Administration Cooperation –
Satellite activities began with NOAA in 1983. Since then 200+ scientific exchanges.
Current cooperative activities include joint work on:
 - Satellite instrument intercalibration and validation
 - Algorithm development:
 - Data assimilation
 - Data exchange

Scientific Data Stewardship (SDS) and NESS

- **Data centers join Climate Services, but NESS is still a critical SDS participant**
- **NOAA/NESS receives and processes large volumes of satellite data**
- **NESS supplied satellite data include US, joint and foreign sources**
- **NESS will continue to focus on end-to-end data management:**
 - Continuity and scientific integrity of long-term data records
 - Ensures data is readily and easily available through use of standards, metadata, etc.
 - Servicing a diverse group of users
 - Protecting provenance to supporting integrity of reanalysis and global climate change scientific analysis
 - Preserving environmental information for future generations



Our name will change, but our end to end responsibility continues...